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FILE

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DEC 28 1992

December 28, 1992

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

\*NOT ADMITTED IN D.C.

Ms. Donna Searcy  
Secretary  
Federal Communications Commission  
1919 M Street, N.W.  
Washington, D.C. 20554

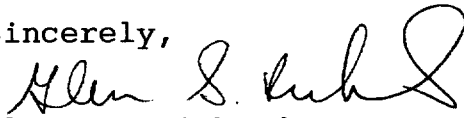
Re: CC Docket No. 92-237 - Administration of the  
North American Numbering Plan

Dear Ms. Searcy:

On April 30, 1992, AMSC Subsidiary Corporation ("AMSC") filed comments with Bell Communications Research advocating that the Mobile Satellite Service be allocated two of the 640 new area codes that will become available in 1995. In the above-referenced proceeding, the Commission seeks comments on a variety of issues concerning the North American Numbering Plan. Notice of Inquiry, FCC 92-470 (October 29, 1992). Accordingly, AMSC requests that its April 30 comments, a copy of which is attached to this letter, be incorporated into the record in this proceeding.

Please contact the undersigned should you have any questions.

Sincerely,

  
Glenn S. Richards  
Counsel for AMSC  
Subsidiary Corporation

Attachment

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*Received @ Bellcore  
April 30, 1992  
Alfred Gaechter Jr*

VIA FEDERAL EXPRESS

Fred Gaechter  
NANP Administration  
Bellcore - Room 1B234  
2900 West Mt. Pleasant Avenue  
Livingston, New Jersey 07039

Re: NANPA Proposal on the Future of  
Numbering in World Zone One

Dear Mr. Gaechter:

Please find enclosed an original and three copies of AMSC Subsidiary Corporation's comments on the NANPA Proposal on the Future of Numbering in World Zone One. Please date stamp one copy and return it in the enclosed self addressed stamped envelope.

Please direct any questions to the undersigned.

Sincerely,

*Glenn S. Richards*  
Glenn S. Richards  
Counsel to AMSC Subsidiary  
Corporation

COMMENTS OF AMSC SUBSIDIARY CORPORATION ON THE  
NORTH AMERICAN NUMBERING PLAN ADMINISTRATOR'S  
PROPOSAL ON THE FUTURE OF NUMBERING IN WORLD ZONE 1

AMSC Subsidiary Corporation ("AMSC"), by its attorneys, hereby submits its comments on the North American Numbering Plan Administrator's Proposal on the Future of Numbering in World Zone 1 ("NANPA Proposal"). As discussed below, AMSC supports the reservation of 90 non-geographic Numbering Plan Area Codes ("NPAs") for use with personal communications services and suggests that two of these area codes be specifically reserved for mobile satellite services ("MSS"). Two non-geographic NPAs will be needed to provide telephone numbers to the millions of MSS subscribers expected by the end of the decade.

Background

AMSC is licensed by the Federal Communications Commission to construct and operate a U.S. domestic Mobile Satellite Service ("MSS") system.<sup>1</sup> AMSC will provide both mobile voice and data communications by satellite to and from mobile terminals on land, at sea, and in the air. Using one of the most powerful commercial satellites ever built for such purposes, AMSC will offer uninterrupted cellular-like service throughout the continental United States, Alaska, Hawaii, Puerto Rico, the

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<sup>1</sup> See Final Decision on Remand, 7 FCC Rcd 266 (1992). AMSC's principal shareholders are subsidiaries or affiliates of Hughes Aircraft Company, McCaw Cellular Communications, Inc., and MTEL, three of the largest and most experienced providers of satellite and mobile communications in the United States. AMSC's shareholders already have invested \$140 million in the construction and launch of the U.S. system.

Virgin Islands, and coastal waters up to 200 miles offshore.

AMSC and Telesat Mobile, Inc. ("TMI"), the Canadian MSS licensee, have an agreement that provides for the two companies to procure the first two MSS satellites jointly. These satellites are under construction now and both are scheduled to be launched in 1994. Service will commence shortly after launch of the first satellite. Together, AMSC and TMI will provide the first truly seamless mobile communications network throughout North America.

MSS is an important new service that will provide mobile radio communications to rural and remote land areas and to coastal waters of the United States where other communications services typically are not available. AMSC estimates that in 1994 about 48 percent of the land mass of the United States, which includes about 23 million people, will not be served by a terrestrial cellular system, and that in some of these areas the population density may not support even a traditional landline telephone service. Only MSS can provide a service which is truly universal and is not dependent upon geographic location or placement of earth-bound antennas or transmitters. Thus, MSS will be ideal to "fill-in" the service gaps left by terrestrial cellular systems.

The satellite's ubiquitous coverage will also permit AMSC to provide a variety of specialized services including aeronautical passenger communications and aeronautical safety services; fixed site service for pipeline management, rural telephony and environmental monitoring; land mobile service for fleet

management, law enforcement and public safety; and maritime services to commercial fishing vessels, shippers, cruise lines and to the Coast Guard.

The AMSC system will be capable of handling voice and data communications for public and private networks. In general, communications originated by a mobile users will be transmitted at L-band to the satellite and then downlinked from the satellite on Ku-band, through a fixed gateway operated by AMSC, and into the public switched telephone network. Calls originating from the PSTN will be transmitted through the AMSC gateway to the satellite and then to the mobile unit. AMSC anticipates initially operating one gateway earth station, probably located in the Washington, D.C. LATA, where traffic will be interchanged with the PSTN.

AMSC expects that the largest demand for MSS will be for an "enhanced roaming" capability for existing cellular subscribers. Using a dual mode mobile unit that combines a standard 800 MHz cellular telephone and an L-band MSS telephone, enhanced roaming capability will provide satellite service to cellular customers when they are outside of the range of terrestrial cellular systems. At this time, if the technology permits, AMSC expects that these customers will rely on their existing cellular telephone number to receive inbound calls, though some subscribers may desire an MSS telephone number, as well.

A second significant demand for MSS will be from mobile voice subscribers who live and work in areas almost exclusively outside the range of terrestrial cellular systems, and who may

choose to subscribe to the satellite service only. These subscribers will require a discrete MSS telephone number. Most subscribers to AMSC's other services that are interconnected with the PSTN will also require discrete MSS telephone numbers.

Telecommunications industry analysts expect explosive growth in the MSS industry over the next decade.<sup>2</sup> These demand estimates are substantiated by the results of the recently completed 1992 World Administrative Radio Conference. At the Conference, 178 MHz was allocated to MSS for use worldwide. An additional 168 MHz was allocated to MSS for use solely in Region 2, which includes World Zone 1 countries.

AMSC conservatively estimates that it will have close to one million subscribers on its first satellite alone, with capacity for millions of more subscribers on its second generation system. The TMI MSS system will serve hundreds of thousands of customers. In addition, other MSS systems may be licensed by the end of the decade.

#### Discussion

The NANPA Proposal addresses the issue of how 640 new NPAs, gained by the implementation of interchangeable codes, should be allocated. AMSC supports the NANPA Proposal to allocate 90 of the new NPAs for use on a non-geographic basis for the emerging personal communications services industry, and suggests that two NPAs be specifically reserved for mobile satellite services.

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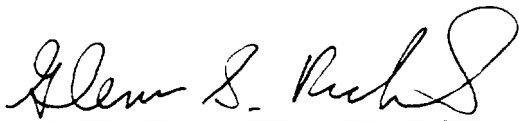
<sup>2</sup>

See e.g. Wireless Communications Market Overview and Analysis, prepared for Jet Propulsion Laboratory, California Institute of Technology, by Gartner Group Consulting (September 1991).

As noted above, tremendous growth in the MSS industry is expected over the next 10 years, with AMSC alone serving millions of subscribers. With approximately eight million telephone numbers available within each NPA, the availability of two NPAs will permit mobile satellite service providers to assign up to 16 million telephone numbers, which should suffice well into the next decade. If two NPAs are not enough, AMSC expects that other non-geographic NPAs will be available, because it is unlikely that terrestrial PCS providers will use all of the remaining 88 non-geographic area codes that NANPA proposes be made available to them.

Respectfully submitted,

AMSC SUBSIDIARY CORPORATION



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Dated: April 29, 1992